REMARKS

Applicants respectfully request reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks. Claims 1, 4, 22, 23, 26, 33, 34, 37-39, 42, and 44-49 are pending in the application, with claims 1, 22, 26, 33, 34, and 37 being independent. Claims 1, 22, 26, 33, 34, and 37 have been amended.

Rejections under § 103(a)

In the Final Office Action mailed January 26, 2006, the Examiner rejected claims 1, 4, 22, 23, 26, 33, 34, 37-39, 42, and 44-49 under 35 U.S.C. §103(a) as being unpatentable over Cookson (U.S. 6,591,365) in view of Bloom (U.S. 6,332,194).

Applicants respectfully submit that the teachings of Cookson cited by the Examiner in support of the rejections under 35 U.S.C. §103(a) are _not_ entitled to the priority date of the provisional application filed by Cookson on January 21, 1999.

Attached hereto as Exhibit A is a true and correct copy of U.S. Provisional Application No. 60/116,641 filed by Cookson on January 21, 1999 (hereinafter "Provisional Application"). Inspection of the Provisional Application demonstrates that it fails to teach or suggest a substantial amount of the subject matter contained in U.S. Patent No. 6,591,365 (hereinafter "the '365 Patent"), including those portions of the '365 Patent that the Examiner relies upon in formulating the subject claim rejections. Accordingly, the subject matter not contained in the Provisional Application can only be accorded the filing date of U.S. Patent Application No. 09/478,713, which was filed on January 6, 2000, and is therefore not prior art to Applicants' present application (claiming priority to a parent application filed on May 22, 1999).

More specifically, claim 1 as presently presented, recites:

1.   An audio watermarking system comprising:
a pattern generator configured to generate both a strong watermark and a weak watermark; and
a watermark insertion unit configured to selectively insert the strong watermark *into at least one segment of an audio signal* and to selectively insert the weak watermark *into at least one other segment of the audio signal*, so that *at least some* resulting segments have either the strong or the weak watermark inserted therein, but not both.

Initially, Applicants respectfully request that notice be taken of the emphasized portions of claim 1 above, since the Final Office Action mailed on January 26, 2006 quoted a prior version of claim 1 which omitted these elements. Assuming this omission was merely a typographical error, the Examiner cites Cookson's '365 Patent, at Col. 4, lines 37-43 and lines 64-66, as teaching the following limitation of claim 1: "a watermark insertion unit configured to selectively insert the strong watermark into at least one segment of an audio signal and to selectively insert the weak watermark into at least one other segment of the audio signal, so that at least some resulting segments have either the strong or the weak watermark inserted therein, but not both." (Office Action, p. 2, ¶ 4). Applicant has previously argued that the '365 Patent fails to teach or fairly suggest this limitation, which arguments will not be repeated herein for the sake of brevity, but rather, are incorporated by reference herein.

More importantly, however, is that irrespective of the Examiner's views regarding the teachings of the '365 Patent, the Provisional Application (from which the '365 Patent claims priority) does not contain the subject matter cited by the Examiner (Cookson's '365 Patent, at Col. 4, lines 37-43 and lines 64-66) in formulating the rejection. The portions of the Provisional Application which discuss watermarks are quoted in their entirety as follows:

(A) ANALOG SIGNALS ARE CONVERTED TO (D)
  DIGITAL AND INSPECTED FOR WATERMARK (G).
  IF THE W/M SAYS DON'T COPY, THEN
  RECORDING IS PREVENTED. WITH NO W/M
  RECORDING IS ENABLED AND SIGNAL IS PASSED
  TO THE COMPRESSOR/ENCODER (H).

(B) DIGITAL SIGNALS RECEIVED IN THE CLEAR ARE
  SCREENED FOR PREVIOUS COMPRESSION (E) AND
  WATERMARK (G) IF W/M SAYS NO COPY AND
  MATERIAL HAS BEEN PREVIOUSLY
  COMPRESSED, THEN RECORDING IS PREVENTED.
  IF NO W/M OR IF MATERIAL HAS NOT BEEN
  COMPRESSED THEN RECORDING IS ENABLED
  AND SIGNAL IS PASSED TO THE
  COMPRESSOR/ENCODER (H).

(THIS REQUIRES A DIGITAL SIGNATURE IN THE
  ORIGINAL CD OR OTHER RECORDING THAT WILL
  NOT SURVIVE COMPRESSION – THE OPPOSITE OF
  A ROBUST WATERMARK)

***

NOTES:
1. REQUIRES ADOPTION OF AN "INVERSE
   WATERMARK" THAT SURVIVES MIX DOWN BUT
   NOT COMPRESSION.

(Provisional Application, p. 1, ¶¶ 1-3, and p. 3, ¶ 1).

The cited passages of Cookson's '365 Patent which the Examiner relies upon in formulating the rejection under 35 U.S.C. §103(a) state as follows:

> ... For example, consider a watermark that is a standard digital signature (an encrypted hash of some portion of the linear PCM music file) whose bits replace the least significant bits in some sequence of digital samples. (This replacement has almost no effect on the music itself.) At least some of these least significant bits are invariably irretrievably lost during compression. ...
>
> In its broadest form the invention does not require use of two separate watermarks. A single watermark may suffice to facilitate the detection of pirated music. ...

(Cookson's '365 Patent, at Col. 4, lines 37-43 and lines 64-66)

Examination of the Provisional Application (Exhibit A) demonstrates that the Provisional Application fails to teach or suggest the subject matter relied upon by the Examiner in formulating the rejection under 35 U.S.C. §103(a). There is no teaching in the Provisional Application of "a watermark that is a standard digital signature (an encrypted hash of some portion of the linear PCM music file) whose bits replace the least significant bits in some sequence of digital samples," nor is there any teaching in the Provisional Application that "This replacement has almost no effect on the music itself." ('365 Patent, 4:37-41). The Provisional Application further fails to teach "At least some of these least significant bits are invariably irretrievably lost during compression," and also fails to teach "." ('365 Patent, 4:41-43). Finally, the Provisional Application also fails to teach "In its broadest form the invention does not require use of two separate watermarks. A single watermark may suffice to facilitate the detection of pirated music." ('365 Patent, 4:64-66).

Because the subject matter cited by the Examiner is not contained in the Provisional Application, that subject matter can only be accorded the filing date of U.S. Patent Application No. 09/478,713, which was filed on January 6, 2000. Thus, the subject matter cited by the Examiner is not prior art to Applicants' present application (claiming priority to a parent application filed on May 22, 1999), and the rejections under 35 U.S.C. §103(a) should be withdrawn.

Furthermore, examination of the Provisional Application (Exhibit A) further demonstrates that the Provisional Application fails to disclose, teach, or fairly suggest "a watermark insertion unit configured to selectively insert the strong watermark into at least one segment of an audio signal and to selectively insert the weak watermark into at least one other segment of the audio signal, so that at least some resulting segments have either the strong or the weak watermark inserted therein, but not both," as recited in Applicants' claim 1.

Bloom is not cited for, and indeed does not remedy the above-noted deficiencies of the Provisional Application. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections of claim 1 under 35 U.S.C. §103(a). Claims 4 and 44 depend from claim 1 and are allowable at least due to their dependency on claim 1, and also due to additional limitations recited in those claims.

Claim 22 recites, in relevant part, an audio watermarking architecture comprising "a watermark encoding system configured to selectively insert a strong watermark into at least one segment of an audio signal and to selectively insert the weak watermark into at least one other segment of the audio signal, so that at least some resulting segments have either the strong or the weak watermark inserted therein, but not both[.]" For the reasons set forth above with respect to the rejection of claim 1, the rejection of claim 22 under 35 U.S.C. §103(a) should be withdrawn, and claim 22 should be allowed. Claims 23 and 45 depend from claim 22 and are allowable at least due to their dependency on claim 22, and also due to additional limitations recited in those claims.

Claim 26 recites "A method for watermarking an audio signal, comprising: watermarking a first portion of the audio signal with a strong watermark; and watermarking a second portion of the audio signal with a weak watermark, wherein the first and second portions are separate." Because there is no teaching or suggestion in the Provisional Application of "watermarking a first portion of the audio signal with a strong watermark; and watermarking a second portion of the audio signal with a weak watermark, wherein the first and second portions are separate" as recited in claim 26, the rejection of claim 26 under 35 U.S.C. §103(a) should be withdrawn, and claim 26 should be allowed. Claim 46 depends from claim 26 and is allowable at least due to its dependency on claim 26, and also due to additional limitations recited in this claim.

Claim 33 recites, in relevant part, a method comprising "selectively encoding portions of an audio signal with a strong watermark and selectively encoding other portions of the audio signal with a strong watermark, so that at least some resulting portions have either the strong or the weak watermark encoded therein, but not both[.]" For the reasons set forth above with respect to the rejection of claim 1, the rejection of claim 33 under 35 U.S.C. §103(a) should be withdrawn, and claim 33 should be allowed. Claim 47 depends from claim 33 and is allowable at least due to its dependency on claim 33, and also due to additional limitations recited in this claim.

Claim 34 recites "A computer readable medium having computer executable instructions for: watermarking a first portion of an audio signal with a strong watermark; and watermarking a second portion of the audio signal with a weak watermark, wherein the first and second portions are separate." Because there is no teaching or suggestion in the Provisional Application of "watermarking a first portion of the audio signal with a strong watermark; and watermarking a second portion of the audio signal with a weak watermark, wherein the first and second portions are separate" as recited in claim 34, the rejection of claim 34 under 35 U.S.C. §103(a) should be withdrawn, and claim 34 should be allowed. Claim 48 depends from claim 34 and is allowable at least due to its dependency on claim 34, and also due to additional limitations recited in this claim.

Claim 37 recites "An audio watermarking system comprising: a pattern generator configured to generate both a strong watermark and a weak watermark; and a watermark insertion unit configured to insert the strong watermark into a first segment of the audio signal and to insert the weak watermark into a second segment of the audio signal, wherein the first and second segments are separate." Because there is no teaching or suggestion in the Provisional Application of "watermarking a first portion of the audio signal with a strong watermark; and

watermarking a second portion of the audio signal with a weak watermark, wherein the first and second portions are separate" as recited in claim 37, the rejection of claim 37 under 35 U.S.C. §103(a) should be withdrawn, and claim 37 should be allowed. Claims 38-39, 42, and 49 depend from claim 37 and are allowable at least due to its dependency on claim 37, and also due to additional limitations recited in these claims.

CONCLUSION

For the foregoing reasons, Applicants respectfully submit that claims 1, 4, 22, 23, 26, 33, 34, 37-39, 42, and 44-49 are in condition for allowance. If there are any remaining issues that may be handled by telephone conference, the Examiner is kindly invited to telephone the undersigned.

Respectfully Submitted,

Date: _March 23, 2006_   By: _Dale C. Barr_
                                          Dale C. Barr
                                          Lee & Hayes, PLLC
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Enclosures: Exhibit A. Copy of U.S. Provisional Application No. 60/116,641

Exhibit A. Copy of U.S. Provisional Application No. 60/116,641

Please type a plus sign (+) inside this box → [+]

PROVISIONAL APPLICATION FOR PATENT COVER SHEET
This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

INVENTOR(S)

Given Name (first and middle (if any))	Family Name or Surname	Residence (City and either State or Foreign Country)
Christopher J.	Cookson	Los Angeles, CA

☐ Additional Inventors are being named on the ___ separately numbered sheets attached hereto

TITLE OF THE INVENTION (280 characters max)

COPY PROTECTION CONTROL SYSTEM

CORRESPONDENCE ADDRESS

Direct all correspondence to.

☐ Customer Number — Type Customer Number here → Place Customer Number Bar Code Label here

OR

☒ Firm or Individual Name	Gottlieb Rackman & Reisman
Address	270 Madison Avenue
Address	8th Floor

City	New York	State	New York	ZIP	10016-0601
Country	US	Telephone	212 684-3900	Fax	212 684-3999

ENCLOSED APPLICATION PARTS (check all that apply)

☒ Specification Number of Pages	3	☐ Small Entity Statement
☒ Drawing(s) Number of Sheets	1	☐ Other (specify)

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)

☒ A check or money order is enclosed to cover the filing fees

☒ The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 07-1730

FILING FEE AMOUNT ($)
150.00

The Invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☒ No

☐ Yes, the name of the U.S. Government agency and the Government contract number are: _____

Respectfully submitted,
SIGNATURE _____

Date 1/21/99

TYPED or PRINTED NAME Michael Rackman

TELEPHONE 212 684-3900

REGISTRATION NO. (if appropriate) 20,639

Docket Number: _____

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

A1PRGV

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January 21, 1999

Re: Inventor(s) Christopher J. Cookson

Title: COPY PROTECTION CONTROL SYSTEM

Attorney Docket No. 3464/16

Assistant Commissioner of Patents
Washington, D.C. 20231

Dear Sir/Madam:

Enclosed please find provisional application of inventor Christopher J. Cookson. Also enclosed are:

1. Provisional Patent Application Cover Sheet.

2. A check in the amount of $150.00 and

3. A stamped, self-addressed postcard.

The Commissioner is authorized to charge any additional fees that may be required to our Deposit Account No. 07-1730.

Very truly yours,

GOTTLIEB, RACKMAN & REISMAN, P.C.

Michael I. Rackman
Reg. No. 20,639

MIR/ce
Enclosures

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Date of Deposit _1/21/99_
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressed" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks Washington D.C. 20231

Coretta Eggleston
(typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee)

(A) ANALOG SIGNALS ARE CONVERTED TO (D) DIGITAL AND INSPECTED FOR WATERMARK. (G) IF THE W/M SAYS DON'T COPY, THEN RECORDING IS PREVENTED, WITH NO W/M RECORDING IS ENABLED AND SIGNAL IS PASSED TO THE COMPRESSOR/ENCODER (H).

(B) DIGITAL SIGNALS RECEIVED IN THE CLEAR ARE SCREENED FOR PREVIOUS COMPRESSION (E) AND WATERMARK (G) IF W/M SAYS NO COPY AND MATERIAL HAS BEEN PREVIOUSLY COMPRESSED, THEN RECORDING IS PREVENTED, IF NO W/M OR IF MATERIAL HAS NOT BEEN COMPRESSED THEN RECORDING IS ENABLED AND SIGNAL IS PASSED TO THE COMPRESSOR/ENCODER (H)..

(THIS REQUIRES A DIGITAL SIGNATURE IN THE ORIGINAL CD OR OTHER RECORDING THAT WILL NOT SURVIVE COMPRESSION — THE OPPOSITE OF A ROBUST WATERMARK)

(C) DIGITAL SOURCES WHICH ARE SECURE AND VERIFIED ARE PASSED DIRECTLY FROM THE ACCESS CONTROL (F) TO TRANSCODING (A) TO ENCRYPTION (I) — OR DIRECTLY TO ENCRYPTION IF TRANSCODING ISN'T NEEDED.

(K) THE REMOVABLE ELEMENT HAS A UNIQUE IDENTITY WHICH WHEN CONNECTED THRU THE CARRIER (J) (OR IT COULD BE A PERMANENT PART OF (J)) TO THE ENCRYPTOR (I) LEADS TO THE CREATION OF AN ENCRYPTED FILE UNIQUE TO THE ELEMENT

(I) THE ENCRYPTOR MANAGES THE N=X FUNCTION. AN UNLIMITED NUMBER OF FEEDS CAN BE PROVIDED TO A SINGLE DEVICE. IF THE RECEIVING DEVICE REPORTS THAT THE FILE HAS BEEN DELETED FROM (K) OR IS NO LONGER PRESENT ON (K), THE ENCRYPTOR CAN SERVICE ANOTHER ELEMENT IN IT'S PLACE. ....

-2-

NOTES:

1. REQUIRES ADOPTION OF AN "INVERSE WATERMARK" THAT SURVIVES MIX DOWN BUT NOT COMPRESSION.

2. PARTS (D) THRU (I) COULD BE IN A DOCKING ADAPTER OR PC WITH ONLY THE PORTABLE PORTION (J)(K) TO BE CARRIED.

3. PARTS (D) THRU (I) COULD BE INTEGRATED INTO A PORTABLE DEVICE BUT ONLY POWERED IN "UPLOAD" MODE TO CONSERVE POWER

4. ASSUMES (J)(K) CAN REPORT ID AND FILE CONTENTS BACK TO HOST BUT NOT UPLOAD MUSIC CONTENT

(A) ANALOG → (D) D/A

(B) DIGITAL CH'02 → (E) COMPRESSION SCREEN → (G) WATERMARK JULEP

(H) ENCODE/TRANSCODE

(L) DIGITAL SECURE → (F) ACCESS CONTROL

ENCRYPT

10 & REPORT

(J) PORTABLE DEVICE   (K) REMOVABLE